

10
Twelfth Census of the United States.

CENSUS BULLETIN.

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March 20, 1902.

AGRICULTURE.

MARYLAND.

Hon. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I have the honor to transmit herewith, for publication in bulletin form, the statistics of agriculture in the state of Maryland, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that—

The schedules relating to agriculture shall comprehend the following topics: Name of occupant of each farm, color of occupant, tenure, acreage, value of farm and improvements, acreage of different products, quantity and value of products, and number and value of live stock. All questions as to quantity and value of crops shall relate to the year ending December thirty-first next preceding the enumeration.

A "farm," as defined by the Twelfth Census, includes all the land, under one management, used for raising crops and pasturing live stock, with the wood lots, swamps, meadows, etc., connected therewith. It includes also the house in which the farmer resides, and all other buildings used by him in connection with his farming operations.

The farms of Maryland, June 1, 1900, numbered 46,012, and had a value of \$175,178,310, of which amount \$54,810,760, or 31.3 per cent, represents the value of buildings, and \$120,367,550, or 68.7 per cent, the value of the land and of improvements other than buildings. On the same date the value of farm implements and machinery was \$8,611,220, and of live stock, \$20,855,877. These values, added to that of farms, give the "total value of farm property," \$204,645,407. The products derived from domestic animals, poultry, and bees, including animals sold and animals slaughtered on farms, are referred

to in this bulletin as "animal products." The total value of all such products, together with the value of all crops, is termed "total value of farm products." This value for 1899 was \$43,823,419, of which amount \$13,606,450, or 31.0 per cent, represents the value of animal products, and \$30,216,969, or 69.0 per cent, the value of crops, including forest products. The total value of farm products for 1899 exceeds that for 1889 by \$17,380,055, or 65.7 per cent.

The "gross farm income" is obtained by deducting from the total value of farm products the value of the products fed to live stock on the farms of the producers. In 1899 the reported value of products fed was \$8,769,890, leaving \$35,053,529 as the gross farm income. The percentage which this latter amount is of the "total value of farm property" is referred to in the text as the "percentage of gross income upon investment." For Maryland in 1899 it was 17.1 per cent. As no reports of expenditures for taxes, interest, insurance, feed for stock, and similar items have been obtained by any census, no statement of net farm income can be given.

The statistics presented in this bulletin will be treated in greater detail in the final report on agriculture in the United States, which will be published about June 1, 1902. The present publication is designed to present a summarized advance statement for Maryland.

Very respectfully,

L. G. Powers.

Chief Statistician for Agriculture.

AGRICULTURE IN MARYLAND.

GENERAL STATISTICS.

Maryland has a total area of 12,210 square miles, comprising 2,350 square miles of water surface, including Chesapeake Bay and various water courses, and 9,860 square miles of land surface. Of the latter, 8,078 square miles, or 81.9 per cent, are included in farms.

Topographically, the state may be divided into three sections. The western part, which is traversed by the nearly parallel ranges of the Appalachian system, contains fertile wheat lands and fine peach orchards. The north central region, known as the Piedmont plateau, has a strong, fertile soil, adapted to the cultivation of wheat and corn, and is well suited to grazing. In the southern part of the state and east of the bay the soil is light, and well adapted to truck farming and horticulture. The Washington and Baltimore markets render gardening, fruit raising, and dairying especially remunerative. The excellent transportation facilities afforded by railroads and steamship lines have been of great importance in developing the agricultural resources of the state.

NUMBER AND SIZE OF FARMS.

The following table gives, by decades since 1850, the number of farms, the total and average acreage, and the per cent of farm land improved.

TABLE 1.—FARMS AND FARM ACREAGE: 1850 TO 1900.

| YEAR. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | | Per cent of farm land improved. |
|-----------|------------------|---------------------------|-----------|-------------|----------|---------------------------------|
| | | Total. | Improved. | Unimproved. | Average. | |
| 1900..... | 46,012 | 5,170,075 | 3,518,352 | 1,653,723 | 112.4 | 68.0 |
| 1890..... | 40,798 | 4,952,390 | 3,412,908 | 1,539,482 | 121.4 | 68.9 |
| 1880..... | 40,517 | 5,119,331 | 3,342,700 | 1,777,131 | 126.4 | 65.8 |
| 1870..... | 27,000 | 4,512,579 | 2,914,007 | 1,598,572 | 167.1 | 64.6 |
| 1860..... | 25,494 | 4,885,571 | 3,002,287 | 1,833,304 | 189.7 | 62.1 |
| 1850..... | 21,860 | 4,634,350 | 2,797,905 | 1,836,445 | 212.0 | 60.4 |

Between 1850 and 1900 the number of farms more than doubled. During the last decade there was an increase of 5,214 farms, or 12.8 per cent. The total acreage of farm land, however, has increased but 11.6 per cent since 1850. The increase in the number of farms has been accompanied, therefore, by a decrease in the average size of farms, and

the table shows that this decrease has been continuous throughout the period covered.

The acreage of improved land has steadily increased, except during the decade from 1860 to 1870. The rate of increase for the last decade was 3.0 per cent. In 1900 over one-half of the entire land surface of the state was reported as improved farm land.

FARM PROPERTY AND PRODUCTS.

Table 2 presents a summary of the principal statistics relating to farm property and products for each census year, beginning with 1850.

TABLE 2.—VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND OF FARM PRODUCTS: 1850 TO 1900.

| YEAR. | Total value of farm property. | Land, improvements, and buildings. | Implements and machinery. | Live stock. | Farm products. ¹ |
|-------------------------|-------------------------------|------------------------------------|---------------------------|--------------|-----------------------------|
| 1900..... | \$204,645,407 | \$175,178,310 | \$8,611,220 | \$20,855,877 | \$43,823,419 |
| 1890..... | 200,792,960 | 175,058,550 | 6,540,000 | 19,194,320 | 26,443,364 |
| 1880..... | 187,157,266 | 165,503,341 | 5,788,197 | 15,865,728 | 28,839,281 |
| 1870 ² | 194,072,058 | 170,369,684 | 5,268,076 | 18,433,698 | \$35,343,927 |
| 1860..... | 164,652,059 | 145,973,677 | 4,010,529 | 14,667,853 | ----- |
| 1850..... | 97,689,622 | 87,178,545 | 2,463,443 | 7,997,634 | ----- |

¹ For year preceding that designated.

² Values for 1870 were reported in depreciated currency. To reduce to specie basis of other figures they must be diminished one-fifth.

³ Includes betterments and additions to live stock.

Since 1850 the total value of farm property has increased \$107,005,785, and in the last ten years, \$3,852,447. Of the latter amount, \$119,760, or 3.1 per cent, represents the increase in the value of farms; \$2,071,130, or 53.8 per cent, in that of implements and machinery; and \$1,661,557, or 43.1 per cent, in that of live stock. The value of farm products for 1899 exceeds that reported for 1889 by \$17,380,055, or 65.7 per cent. Part of this increase, and of that in implements and machinery, and in live stock, is doubtless the result of a more detailed enumeration in 1900 than heretofore.

COUNTY STATISTICS.

Table 3 gives an exhibit of general agricultural statistics by counties.

TABLE 3.—NUMBER AND ACREAGE OF FARMS, AND VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, JUNE 1, 1900, WITH VALUE OF PRODUCTS OF 1899 NOT FED TO LIVE STOCK, AND EXPENDITURES IN 1899 FOR LABOR AND FERTILIZERS, BY COUNTIES.

| COUNTIES. | NUMBER OF FARMS. | | ACRES IN FARMS. | | VALUES OF FARM PROPERTY. | | | | Value of products not fed to live stock. | EXPENDITURES. | |
|----------------------|------------------|-------------------|-----------------|-----------|---|--------------|-----------------------------|--------------|--|---------------|----------------|
| | Total. | With build- ings. | Total. | Improved. | Land and im- prove- ments (ex- cept build- ings). | Buildings. | Imple- ments and machinery. | Live stock. | | Labor. | Fertili- zers. |
| The State ----- | 46,012 | 45,364 | 5,170,075 | 3,516,352 | \$120,867,550 | \$54,810,760 | \$8,611,220 | \$20,855,877 | \$35,053,529 | \$5,715,520 | \$2,618,890 |
| Allegany ----- | 894 | 881 | 160,348 | 75,905 | 1,945,000 | 669,940 | 136,730 | 338,974 | 519,327 | 58,600 | 16,480 |
| Anne Arundel ----- | 1,889 | 1,835 | 206,967 | 148,325 | 3,659,970 | 1,885,740 | 275,470 | 598,679 | 1,882,241 | 331,670 | 183,970 |
| Baltimore ----- | 4,496 | 4,422 | 340,206 | 244,806 | 23,190,670 | 9,295,710 | 1,285,380 | 2,259,295 | 4,850,962 | 866,030 | 313,560 |
| Baltimore city ----- | 159 | 154 | 3,131 | 2,438 | 1,527,110 | 417,010 | 33,080 | 69,386 | 339,034 | 55,270 | 3,830 |
| Calvert ----- | 1,077 | 1,046 | 136,625 | 88,605 | 1,546,070 | 669,100 | 100,840 | 306,412 | 557,196 | 66,820 | 46,480 |
| Caroline ----- | 1,863 | 1,849 | 183,501 | 125,908 | 2,874,970 | 1,051,050 | 243,080 | 579,514 | 1,126,075 | 125,240 | 93,290 |
| Carroll ----- | 3,352 | 3,297 | 276,933 | 227,693 | 7,210,730 | 4,501,850 | 719,340 | 1,496,895 | 2,437,966 | 336,560 | 160,000 |
| Cecil ----- | 1,633 | 1,616 | 200,629 | 141,401 | 4,773,490 | 3,024,820 | 440,610 | 984,644 | 1,507,383 | 301,840 | 146,430 |
| Charles ----- | 1,900 | 1,877 | 263,255 | 163,465 | 2,775,240 | 1,216,610 | 191,650 | 578,843 | 823,675 | 68,240 | 48,500 |
| Dorchester ----- | 2,007 | 1,990 | 243,497 | 128,160 | 2,761,440 | 1,087,720 | 218,740 | 628,417 | 1,049,181 | 138,960 | 76,800 |
| Frederick ----- | 3,747 | 3,729 | 374,331 | 308,041 | 12,394,570 | 5,645,840 | 855,380 | 2,160,795 | 2,735,448 | 502,250 | 190,560 |
| Garrett ----- | 1,788 | 1,765 | 243,510 | 123,932 | 2,900,670 | 992,210 | 226,210 | 822,072 | 869,714 | 63,600 | 23,220 |
| Harford ----- | 2,431 | 2,400 | 248,925 | 174,255 | 5,519,510 | 4,160,860 | 570,000 | 1,460,362 | 2,154,353 | 372,010 | 272,960 |
| Howard ----- | 1,214 | 1,198 | 146,039 | 110,546 | 3,494,690 | 2,275,470 | 321,990 | 676,296 | 1,041,271 | 217,660 | 108,410 |
| Kent ----- | 941 | 917 | 169,288 | 138,944 | 4,258,300 | 1,365,050 | 276,780 | 774,715 | 1,454,829 | 303,010 | 112,500 |
| Montgomery ----- | 2,085 | 2,070 | 283,469 | 212,840 | 9,491,930 | 3,525,170 | 576,010 | 1,486,553 | 2,160,751 | 418,060 | 198,370 |
| Prince George ----- | 2,374 | 2,315 | 265,003 | 174,273 | 5,710,680 | 2,577,410 | 323,820 | 712,118 | 1,482,749 | 268,210 | 74,310 |
| Queen Anne ----- | 1,458 | 1,437 | 224,143 | 172,396 | 4,558,610 | 1,590,780 | 384,450 | 1,049,553 | 1,400,201 | 288,880 | 130,330 |
| St. Mary ----- | 1,292 | 1,280 | 192,503 | 109,553 | 1,825,470 | 870,550 | 153,530 | 450,554 | 686,465 | 103,570 | 63,230 |
| Somerset ----- | 1,521 | 1,496 | 144,970 | 82,650 | 1,622,690 | 995,000 | 167,020 | 381,843 | 770,197 | 131,070 | 42,030 |
| Talbot ----- | 1,199 | 1,193 | 164,792 | 119,266 | 4,200,570 | 1,690,700 | 304,220 | 759,581 | 1,361,877 | 241,480 | 89,040 |
| Washington ----- | 2,393 | 2,358 | 249,221 | 197,948 | 8,223,320 | 3,552,060 | 516,250 | 1,221,620 | 1,967,889 | 309,750 | 111,540 |
| Wicomico ----- | 2,314 | 2,278 | 207,284 | 122,453 | 1,923,360 | 832,320 | 171,640 | 469,069 | 943,203 | 79,380 | 60,590 |
| Worcester ----- | 1,987 | 1,961 | 241,435 | 132,549 | 1,978,540 | 878,290 | 173,400 | 689,658 | 926,542 | 72,360 | 52,490 |

Increases in the number of farms are shown for all counties except Anne Arundel and Howard, which show decreases of 0.8 per cent and 2.9 per cent, respectively. Baltimore city shows the highest percentage of increase, 54.4; next in order come the following counties: Charles, 53.6 per cent; Caroline, 47.5 per cent; and Prince George, 31.8 per cent.

The portion of the land surface included in farms varies from 16.3 per cent in Baltimore city to 99.0 per cent in Carroll county. The average size of farms ranges from 19.7 acres in Baltimore city to 179.9 acres in Kent county. The total acreage in farms increased, in the last decade, in all counties except Anne Arundel, Howard, St. Mary, Baltimore, and Kent, which show decreases of 12.5, 3.5, 2.1, 1.6, and 0.5 per cent, respectively. The decrease in Baltimore city was 11.9 per cent—greater than that in any county except Anne Arundel. The highest percentage of increase was in Allegany county, where it amounted to 22.8 per cent.

More than one-half of the counties in Maryland show increases in the area of improved land, the relative gains being greatest in Caroline, Allegany, Charles, Calvert, Garrett, and Wicomico counties. The greatest relative decreases are shown for Baltimore city, and for Anne Arundel, St. Mary, Worcester, and Howard counties. The per cent of farm land improved varies from 82.3 in Frederick county to 47.3 in Allegany county.

Baltimore, Charles, and Montgomery counties, in the order named, show the largest increases in the value of farms, while the greatest decreases are shown for Queen Anne, Anne Arundel, Talbot, and Howard counties. The

average value of farms for the state is \$3,807, and varies from \$1,212 in Wicomico county to \$12,227 in Baltimore city. The ratio of the value of farm buildings to that of farm land ranges from 75.4 per cent in Harford county to 27.3 per cent in Baltimore city.

Anne Arundel county alone shows a decrease, amounting to 1.2 per cent, in the value of implements and machinery. The greatest percentages of increase are for Baltimore city, 202.4, and Calvert county, 122.3. The per cent of increase for the state is 31.7. The average values per farm vary from \$74 in Wicomico county to \$294 in Kent county.

Decreases in the value of live stock are shown in two instances only, Anne Arundel county, 13.0 per cent, and Baltimore city, 7.4 per cent. The most marked increases are for Charles county, 40.3 per cent; Calvert county, 35.7 per cent; and Worcester county, 35.0 per cent.

The average value per farm of the products of 1899 not fed to live stock varies from \$410 in Wicomico county to \$2,132 in Baltimore city. Greatest average gross incomes per acre are shown by Baltimore city, \$108; Baltimore county, \$14; and Anne Arundel county, \$9. The lowest average, \$3, is shown for Charles county.

The average expenditure per farm for labor, including the value of board furnished, ranges from \$34 in Wicomico county to \$348 in Baltimore city.

Nearly all of the counties report larger expenditures for fertilizers than in 1890. The greatest increase, 213.6 per cent, is shown for Garrett county. The average expenditure per farm ranges from \$13 in Garrett county to \$120 in Kent county.

FARM TENURE.

Table 4 gives a comparative exhibit of farm tenure for 1880, 1890, and 1900. In Table 5 the tenure of farms for 1900 is given by race of farmer, the farms operated by owners being subdivided into four groups, designated as farms operated by "owners," "part owners," "owners and tenants," and "managers." These groups comprise, respectively: (1) Farms operated by individuals who own all the land they cultivate; (2) farms operated by individuals who own a part of the land and rent the remainder from others; (3) farms operated under the joint direction and by the united labor of two or more individuals, one owning the farm or a part of it, and the other, or others, owning no part, but receiving for supervision or labor a share of the products; and (4) farms operated by individuals who receive for their supervision and other services a fixed salary from the owners.

The farms operated by tenants are divided into two groups, designated as farms operated by "cash tenants" and "share tenants." These groups comprise, respectively: (1) Farms operated by individuals who pay a rental in cash or a stated amount of labor or farm produce; (2) farms operated by individuals who pay as rental a stated share of the products.

TABLE 4.—NUMBER AND PER CENT OF FARMS OF SPECIFIED TENURES: 1880 TO 1900.

| YEAR. | Total number of farms. | NUMBER OF FARMS OPERATED BY— | | | PER CENT OF FARMS OPERATED BY— | | |
|------------|------------------------|------------------------------|---------------|----------------|--------------------------------|---------------|----------------|
| | | Owners. ¹ | Cash tenants. | Share tenants. | Owners. ¹ | Cash tenants. | Share tenants. |
| 1900 | 46,012 | 80,565 | 4,056 | 11,391 | 66.4 | 8.8 | 24.8 |
| 1890 | 40,798 | 28,154 | 3,245 | 9,399 | 69.0 | 8.0 | 23.0 |
| 1880 | 40,517 | 27,978 | 3,878 | 8,661 | 69.0 | 9.6 | 21.4 |

¹Including "part owners," "owners and tenants," and "managers."

TABLE 5.—FARMS OF SPECIFIED TENURES, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER, WITH PERCENTAGES.

PART 1.—NUMBER OF FARMS OF SPECIFIED TENURES.

| RACE. | Total number of farms. | Owners. | Part owners. | Owners and tenants. | Managers. | Cash tenants. | Share tenants. |
|----------------------------|------------------------|---------|--------------|---------------------|-----------|---------------|----------------|
| The State..... | 46,012 | 27,888 | 1,495 | 180 | 1,052 | 4,056 | 11,391 |
| White | 40,169 | 24,956 | 1,124 | 171 | 947 | 3,493 | 9,478 |
| Colored ¹ | 5,843 | 2,882 | 371 | 9 | 105 | 563 | 1,913 |

PART 2.—PER CENT OF FARMS OF SPECIFIED TENURES.

| The State..... | 100.0 | 60.5 | 8.2 | 0.4 | 2.3 | 8.8 | 24.8 |
|----------------------------|-------|------|-----|-----|-----|-----|------|
| White | 100.0 | 62.1 | 2.8 | 0.4 | 2.4 | 8.7 | 23.6 |
| Colored ¹ | 100.0 | 49.3 | 6.4 | 0.2 | 1.8 | 9.6 | 32.7 |

¹Including 1 Chinese.

The number of farms operated by owners has increased 9.2 per cent since 1880, each decade showing a gain. The number of cash tenants reported in 1890 was less than in

1880, but in the last decade it has increased 25.0 per cent. The number of share tenants increased in both decades, the rate for the twenty years being 31.5 per cent. The percentages show that the number of farms operated by owners has not increased so rapidly since 1880 as the number operated by share tenants, or so rapidly since 1890 as the number operated by cash tenants.

Of the farms of the state, 87.3 per cent are operated by white farmers and 12.7 per cent by colored farmers. Of the white farmers, 65.3 per cent own all or part of the farms they operate, and 34.7 per cent operate farms owned by others; for colored farmers the corresponding percentages are 55.9 and 44.1.

No previous census has reported the number of farms operated by "part owners," "owners and tenants," or "managers," but it is believed that the number of farms conducted by the last-named class is constantly increasing.

OWNERSHIP OF RENTED FARMS.

The ownership of 14,608 of the 15,447 rented farms in Maryland was ascertained by the enumerators; that of 839 was not reported. Titles to the 14,608 farms are vested in 11,792 owners, an average of approximately 124 farms to every 100 owners. Of the 11,792 owners or landlords, 10,235 possess one farm each; 1,007 own 2 each; 311, 3; 96, 4; 42, 5; 26, 6; 27, 7; 18, 8; 17, 9; 2, 10; 3, 11; 3, 13; and the remaining 5 own 12, 15, 19, 20, and 32 farms, respectively.

Of these landlords, 10,375, possessing 12,928 rented farms, reside in Maryland. The owners of 10,725 of these farms live in the counties in which their farms are located. Of the nonresident owners, 783 live in the South Atlantic states, 552 in the North Atlantic states, 55 in the North Central states, 14 in the South Central states, 9 in the Western states, and 4 in foreign countries.

FARMS CLASSIFIED BY RACE OF FARMER AND BY TENURE.

Tables 6 and 7 present the principal statistics for farms classified by race of farmer and by tenure.

TABLE 6.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER AND BY TENURE, WITH PERCENTAGES.

| RACE OF FARMER, AND TENURE. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|------------------------------------|------------------|---------------------------|-----------|-----------|-------------------------|-----------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 46,012 | 112.4 | 5,170,075 | 100.0 | \$204,645,407 | 100.0 |
| White farmers..... | 40,169 | 119.4 | 4,795,774 | 92.8 | 196,435,535 | 96.0 |
| Colored farmers ¹ | 5,843 | 64.1 | 374,301 | 7.2 | 8,209,872 | 4.0 |
| Owners..... | 27,888 | 98.9 | 2,615,068 | 50.6 | 106,956,612 | 52.3 |
| Part owners..... | 1,495 | 105.9 | 158,332 | 3.0 | 6,185,489 | 3.0 |
| Owners and tenants..... | 180 | 145.8 | 26,242 | 0.5 | 890,103 | 0.4 |
| Managers..... | 1,052 | 195.6 | 205,754 | 4.0 | 13,905,084 | 6.8 |
| Cash tenants..... | 4,056 | 96.5 | 391,494 | 7.6 | 20,362,690 | 10.0 |
| Share tenants..... | 11,391 | 155.7 | 1,778,185 | 34.3 | 56,339,429 | 27.5 |

¹Including 1 Chinese.

TABLE 7.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY RACE OF FARMER AND BY TENURE.

| RACE OF FARMER, AND TENURE. | AVERAGE VALUES PER FARM OF— | | | | | Per cent of gross income on total invest- ment in farm property. |
|------------------------------------|---|-----------------|--|----------------|--|---|
| | Farm property, June 1, 1900. | | | | Gross income (products of 1899 not fed to live stock). | |
| | Land and im- prove- ments (except build- ings). | Build- ings. | Imple- ments and ma- chinery. | Live stock. | | |
| The State..... | \$2,616 | \$1,191 | \$187 | \$454 | \$762 | 17.1 |
| White farmers..... | 2,876 | 1,314 | 206 | 494 | 832 | 17.0 |
| Colored farmers ¹ | 830 | 348 | 57 | 170 | 280 | 19.9 |
| Owners..... | 2,098 | 1,144 | 188 | 417 | 701 | 18.2 |
| Part owners..... | 2,369 | 1,158 | 171 | 489 | 750 | 18.1 |
| Owners and tenants..... | 2,753 | 1,544 | 210 | 471 | 862 | 17.3 |
| Managers..... | 8,369 | 8,616 | 384 | 849 | 1,274 | 9.6 |
| Cash tenants..... | 3,513 | 989 | 150 | 368 | 697 | 13.9 |
| Share tenants..... | 3,060 | 1,153 | 195 | 538 | 886 | 17.9 |

¹ Including 1 Chinese.

The value of the farms owned by colored people, including implements, machinery, and live stock, is \$2,859,822; the value of the implements, machinery, and live stock on farms operated by colored managers and tenants is \$739,330. The total, \$3,599,152, is doubtless somewhat in excess of the actual wealth of the colored farmers of Maryland, as it is improbable that the colored managers and tenants own all of the machinery and live stock on the farms which they operate.

Farms operated by owners have the smallest average area, 93.9 acres, and those conducted by managers the largest, 195.6 acres. A number of the farms operated by managers are adjuncts of public institutions, while others are conducted for wealthy individuals, in connection with their summer homes. These farms are, as a rule, favorably located and highly improved, and the average values of their several forms of farm property, shown in Table 7, are much larger than those of any other class of farms grouped by tenure. The ratio which the gross income bears to the total value of farm property is, however, smaller than for any other group. This is due to the high average valuation of the farm property, and to the fact that some of these farms are not cultivated for profit.

FARMS CLASSIFIED BY AREA.

Tables 8 and 9 present the principal statistics for farms classified by area.

TABLE 8.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY AREA, WITH PERCENTAGES.

| AREA. | Num- ber of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|---------------------------|--------------------------|------------------------------|-----------|------------------|----------------------------|--------------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 46,012 | 112.4 | 5,170,075 | 100.0 | \$204,645,407 | 100.0 |
| Under 3 acres..... | 442 | 2.3 | 1,006 | (¹) | 717,439 | 0.4 |
| 3 to 9 acres..... | 3,393 | 6.6 | 22,439 | 0.4 | 4,234,225 | 2.1 |
| 10 to 19 acres..... | 4,315 | 13.7 | 59,329 | 1.2 | 7,753,748 | 3.8 |
| 20 to 49 acres..... | 7,683 | 33.1 | 254,342 | 4.9 | 19,264,010 | 9.4 |
| 50 to 99 acres..... | 9,307 | 70.8 | 658,833 | 12.7 | 30,971,499 | 15.1 |
| 100 to 174 acres..... | 11,543 | 129.4 | 1,494,118 | 28.9 | 57,728,199 | 28.2 |
| 175 to 259 acres..... | 5,389 | 208.9 | 1,125,588 | 21.8 | 38,782,935 | 19.0 |
| 260 to 499 acres..... | 3,270 | 330.5 | 1,080,892 | 20.9 | 33,447,440 | 16.3 |
| 500 to 999 acres..... | 591 | 600.4 | 354,853 | 6.9 | 9,248,458 | 4.5 |
| 1,000 acres and over..... | 79 | 1,502.3 | 118,685 | 2.3 | 2,447,454 | 1.2 |

¹ Less than one-tenth of 1 per cent.

TABLE 9.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY AREA.

| AREA. | AVERAGE VALUES PER FARM OF— | | | | | Per cent of gross income on total invest- ment in farm property. |
|-------------------------|---|-----------------|--|----------------|--|---|
| | Farm property, June 1, 1900. | | | | Gross income (products of 1899 not fed to live stock). | |
| | Land and im- prove- ments (except build- ings). | Build- ings. | Imple- ments and ma- chinery. | Live stock. | | |
| The State----- | \$2,616 | \$1,191 | \$187 | \$454 | \$762 | 17.1 |
| Under 3 acres----- | 714 | 730 | 70 | 109 | 374 | 23.1 |
| 3 to 9 acres----- | 555 | 541 | 60 | 107 | 215 | 17.1 |
| 10 to 19 acres----- | 937 | 643 | 78 | 139 | 279 | 15.6 |
| 20 to 49 acres----- | 1,398 | 796 | 103 | 210 | 393 | 15.7 |
| 50 to 99 acres----- | 1,874 | 904 | 155 | 335 | 561 | 16.9 |
| 100 to 174 acres----- | 2,915 | 1,315 | 226 | 545 | 926 | 18.5 |
| 175 to 259 acres----- | 4,383 | 1,733 | 298 | 783 | 1,251 | 17.4 |
| 260 to 499 acres----- | 6,445 | 2,327 | 374 | 1,083 | 1,706 | 16.7 |
| 500 to 999 acres----- | 10,027 | 3,586 | 526 | 1,510 | 2,401 | 15.3 |
| 1,000 acres and over--- | 21,151 | 6,913 | 802 | 2,114 | 3,191 | 10.3 |

The group of medium-sized farms, containing from 100 to 174 acres each, comprises a larger total acreage than any other group and represents a greater value in farm property.

Except for farms of less than 3 acres, the average values for the groups of farms given in Table 9 rise in unbroken series as the farms increase in size. For the group of farms of less than 3 acres each, the average values are relatively high, as this group includes 70 of the 121 florists' establishments of the state, and a large number of city dairies. It should be borne in mind that the incomes from these industries are determined not so much by the acreage of

land used as by the amount of capital invested and the amounts expended for labor and fertilizers.

The average gross incomes per acre for the various groups classified by area are as follows: Farms under 3 acres, \$165; 3 to 9 acres, \$33; 10 to 19 acres, \$20; 20 to 49 acres, \$12; 50 to 99 acres, \$8; 100 to 174 acres, \$7; 175 to 259 acres, \$6; 260 to 499 acres, \$5; 500 to 999 acres, \$4; 1,000 acres and over, \$2. It will be noted that the average gross income per acre decreases as the farms increase in size.

FARMS CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

In Tables 10 and 11 the farms are classified by principal source of income. If the value of the hay and grain raised on any farm exceeds that of any other crop and constitutes at least 40 per cent of the total value of products not fed to live stock, the farm is classified as a hay and grain farm. If vegetables are the leading crop, constituting 40 per cent of the value of the products, it is a vegetable farm. The farms of the other groups are classified in accordance with the same general principle. "Miscellaneous" farms are those whose operators do not derive 40 per cent of their income from any one class of farm products. Farms with no income in 1899 are classified according to the agricultural operations upon other farms in the same locality.

TABLE 10.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME, WITH PERCENTAGES.

| PRINCIPAL SOURCE OF INCOME. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|-----------------------------|------------------|---------------------------|-----------|------------------|-------------------------|------------------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 46,012 | 112.4 | 5,170,075 | 100.0 | \$204,645,407 | 100.0 |
| Hay and grain | 10,458 | 170.7 | 1,785,521 | 34.5 | 78,076,656 | 38.2 |
| Vegetables | 4,718 | 70.4 | 331,970 | 6.4 | 18,228,834 | 8.9 |
| Fruit | 1,694 | 66.8 | 112,877 | 2.2 | 4,595,662 | 2.2 |
| Live stock | 11,897 | 80.6 | 958,389 | 18.5 | 32,895,634 | 16.1 |
| Dairy produce | 3,041 | 96.1 | 292,250 | 5.7 | 20,730,657 | 10.1 |
| Tobacco | 8,056 | 148.8 | 454,716 | 8.8 | 8,939,594 | 4.4 |
| Sugar | 15 | 161.4 | 2,421 | 0.1 | 59,648 | (¹) |
| Flowers and plants | 121 | 7.6 | 624 | (¹) | 877,098 | 0.4 |
| Nursery products | 15 | 245.7 | 3,685 | 0.1 | 300,468 | 0.2 |
| Miscellaneous | 10,997 | 111.7 | 1,227,863 | 23.7 | 39,932,156 | 19.5 |

¹ Less than one-tenth of 1 per cent.

TABLE 11.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

| PRINCIPAL SOURCE OF INCOME. | AVERAGE VALUES PER FARM OF— | | | | | Per cent of gross income on total investment in farm property. |
|-----------------------------|---|------------|---------------------------|-------------|--|--|
| | Farm property June 1, 1900. | | | | Gross income (products of 1899 not fed to live stock). | |
| | Land and improvements (except buildings). | Buildings. | Implements and machinery. | Live stock. | | |
| The State ----- | \$2,616 | \$1,191 | \$187 | \$454 | \$762 | 17.1 |
| Hay and grain ----- | 4,678 | 1,777 | 294 | 717 | 1,186 | 15.9 |
| Vegetables ----- | 2,411 | 1,044 | 169 | 240 | 821 | 21.3 |
| Fruit ----- | 1,547 | 819 | 121 | 226 | 739 | 27.3 |
| Live stock ----- | 1,432 | 850 | 130 | 353 | 439 | 15.9 |
| Dairy produce ----- | 4,108 | 1,765 | 250 | 694 | 1,020 | 15.0 |
| Tobacco ----- | 1,607 | 817 | 107 | 394 | 590 | 20.2 |
| Sugar ----- | 2,293 | 840 | 327 | 517 | 757 | 19.0 |
| Flowers and plants ----- | 3,766 | 3,200 | 194 | 89 | 2,909 | 40.1 |
| Nursery products ----- | 16,127 | 3,127 | 496 | 881 | 9,116 | 44.2 |
| Miscellaneous ----- | 2,026 | 1,044 | 170 | 391 | 627 | 17.8 |

For the several classes of farms the average values per acre of products not fed to live stock are: Flowers and plants, \$380.88; nursery products, \$37.11; vegetables, \$11.67; fruit, \$11.14; dairy produce, \$10.61; hay and grain, \$6.95; live stock, \$5.45; sugar, \$4.69; tobacco, \$3.97; and miscellaneous, \$5.61.

The wide variations shown in the average gross income and in percentage of gross income upon investment are due largely to the fact that in computing gross income no deduction is made for expenditures. For florists' establishments, nurseries, and market gardens the average expenditure for such items as labor and fertilizers represents a far larger percentage of the gross income than in the case of "hay and grain," "live stock," or "miscellaneous" farms. Were it possible to present the average net incomes, the variations shown would be comparatively slight.

FARMS CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

Tables 12 and 13 present data relating to farms classified by reported value of products not fed to live stock.

TABLE 12.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK, WITH PERCENTAGES.

| VALUE OF PRODUCTS NOT FED TO LIVE STOCK. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|--|------------------|---------------------------|-----------|-----------|-------------------------|-----------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 46,012 | 112.4 | 5,170,075 | 100.0 | \$204,645,407 | 100.0 |
| \$0..... | 233 | 86.4 | 20,121 | 0.4 | 508,660 | 0.2 |
| \$1 to \$49..... | 1,160 | 28.1 | 32,554 | 0.6 | 1,057,930 | 0.5 |
| \$50 to \$99..... | 2,442 | 35.1 | 85,657 | 1.7 | 2,662,970 | 1.3 |
| \$100 to \$249..... | 8,987 | 50.1 | 449,907 | 8.7 | 13,417,950 | 6.6 |
| \$250 to \$499..... | 11,030 | 81.2 | 895,781 | 17.8 | 27,267,340 | 13.3 |
| \$500 to \$999..... | 10,934 | 125.7 | 1,374,914 | 26.6 | 48,601,470 | 23.8 |
| \$1,000 to \$2,499..... | 9,359 | 185.9 | 1,739,808 | 33.7 | 79,050,367 | 38.6 |
| \$2,500 and over..... | 1,867 | 306.0 | 571,333 | 11.0 | 32,078,720 | 15.7 |

TABLE 13.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

| VALUE OF PRODUCTS NOT FED TO LIVE STOCK. | AVERAGE VALUES PER FARM OF— | | | | | Per cent of gross income on total invest- ment in farm property. |
|--|---|-----------------|--|----------------|--|---|
| | Farm property, June 1, 1900. | | | | Gross income (products of 1899 not fed to live stock). | |
| | Land and im- prove- ments (except build- ings). | Build- ings. | Imple- ments and ma- chinery. | Live stock. | | |
| The State..... | \$2,616 | \$1,191 | \$187 | \$454 | \$762 | 17.1 |
| \$0..... | 1,381 | 651 | 50 | 101 | ----- | ----- |
| \$1 to \$49..... | 518 | 308 | 26 | 60 | 82 | 3.5 |
| \$50 to \$99..... | 591 | 366 | 50 | 83 | 74 | 6.8 |
| \$100 to \$249..... | 800 | 490 | 59 | 144 | 172 | 11.5 |
| \$250 to \$499..... | 1,358 | 751 | 106 | 257 | 360 | 14.5 |
| \$500 to \$999..... | 2,568 | 1,221 | 196 | 460 | 707 | 15.9 |
| \$1,000 to \$2,499..... | 5,055 | 2,147 | 362 | 882 | 1,542 | 18.3 |
| \$2,500 and over..... | 10,951 | 3,898 | 653 | 1,685 | 3,831 | 22.3 |

There are 233 farms, ranging in area from 3 to 1,000 acres, which report no income. The comparatively high average values of the land and buildings of these farms indicate that many of them are summer homes held for pleasure and not for profit. Some, however, are farms which were partially abandoned in 1899, while others had changed owners or tenants, and the persons in charge, June 1, 1900, were unable to give definite information concerning the products of the preceding year. To this extent the reports fall short of giving a complete exhibit of farm income in 1899.

LIVE STOCK.

At the request of the various live-stock associations of the country, a new classification of domestic animals was adopted for the Twelfth Census. The age grouping for neat cattle was determined in accordance with their present and prospective relations to the dairy industry and the supply of meat products. Horses and mules are classified by age, and neat cattle and sheep by age and sex. The new classification permits a very close comparison with the figures published in previous census reports.

Table 14 presents a summary of live-stock statistics.

TABLE 14.—NUMBER OF DOMESTIC ANIMALS, FOWLS, AND BEES ON FARMS, JUNE 1, 1900, WITH TOTAL AND AVERAGE VALUES, AND NUMBER OF DOMESTIC ANIMALS NOT ON FARMS.

| LIVE STOCK. | Age in years. | ON FARMS. | | | NOT ON FARMS. |
|---|--------------------|-----------|------------|----------------|---------------|
| | | Number. | Value. | Average value. | Number. |
| Calves..... | Under 1..... | 55,465 | \$153,971 | \$3.18 | 1,164 |
| Steers..... | 1 and under 2..... | 13,693 | 219,247 | 16.01 | 284 |
| Steers..... | 2 and under 3..... | 14,068 | 385,351 | 27.39 | 166 |
| Steers..... | 3 and over..... | 13,689 | 494,255 | 36.11 | 1,053 |
| Bulls..... | 1 and over..... | 10,927 | 246,334 | 24.57 | 117 |
| Heifers..... | 1 and under 2..... | 28,930 | 495,742 | 17.14 | 761 |
| Cows kept for milk..... | 2 and over..... | 147,284 | 4,339,777 | 29.47 | 10,232 |
| Cows and heifers not kept for milk..... | 2 and over..... | 9,490 | 218,441 | 23.02 | 287 |
| Colts..... | Under 1..... | 8,042 | 231,074 | 25.84 | 300 |
| Horses..... | 1 and under 2..... | 9,938 | 455,204 | 45.80 | 280 |
| Horses..... | 2 and over..... | 130,114 | 8,666,416 | 66.61 | 39,154 |
| Mule colts..... | Under 1..... | 405 | 15,192 | 37.51 | 4 |
| Mules..... | 1 and under 2..... | 1,136 | 60,408 | 53.46 | 68 |
| Mules..... | 2 and over..... | 15,070 | 1,312,922 | 82.21 | 2,151 |
| Asses and burros..... | All ages..... | 69 | 6,810 | 98.70 | 72 |
| Lambs..... | Under 1..... | 79,631 | 268,248 | 3.37 | 627 |
| Sheep (ewes)..... | 1 and over..... | 101,006 | 381,448 | 3.78 | 2,133 |
| Sheep (rams and wethers)..... | 1 and over..... | 10,514 | 46,835 | 4.45 | 215 |
| Swine..... | All ages..... | 317,902 | 1,329,143 | 4.18 | 41,910 |
| Goats..... | All ages..... | 1,179 | 4,023 | 3.41 | 384 |
| Fowls: 1..... | ----- | ----- | ----- | ----- | ----- |
| Chickens 2..... | ----- | 2,113,544 | ----- | ----- | ----- |
| Turkeys..... | ----- | 101,782 | ----- | ----- | ----- |
| Geese..... | ----- | 33,389 | 1,158,020 | ----- | ----- |
| Ducks..... | ----- | 56,930 | ----- | ----- | ----- |
| Bees (swarms of)..... | ----- | 28,013 | 61,013 | 2.18 | ----- |
| Value of all live stock on farms..... | ----- | ----- | 20,855,877 | ----- | ----- |

¹The number reported is of fowls over 3 months old. The value is of all old and young.

²Including Guinea fowls.

The total value of all live stock on farms, June 1, 1900, was \$20,855,877. Of this amount 44.8 per cent represents the value of horses; 20.8 per cent, that of dairy cows; 12.1 per cent, that of other neat cattle; 6.7 per cent, that of mules and asses; 6.4 per cent, that of swine; 5.6 per cent, that of poultry; 3.3 per cent, that of sheep; and 0.3 per cent, that of all other live stock.

No reports were received concerning the value of live stock not on farms, but it is probable that such animals have higher average values than those on farms. Allowing the same averages, however, the total value of all live stock in the state, exclusive of the poultry and bees not on farms, is approximately \$24,240,000.

CHANGES IN LIVE STOCK ON FARMS.

The following table shows the changes since 1850 in the number of the most important domestic animals.

TABLE 15.—NUMBER OF SPECIFIED DOMESTIC ANIMALS ON FARMS: 1850 TO 1900.

| YEAR. | Dairy cows. | Other neat cattle. | Horses. | Mules and asses. | Sheep. ¹ | Swine. |
|-----------|-------------|--------------------|---------|------------------|---------------------|---------|
| 1900..... | 147,284 | 145,362 | 148,994 | 17,580 | 111,520 | 317,902 |
| 1890..... | 142,198 | 124,991 | 130,395 | 14,161 | 132,329 | 312,020 |
| 1880..... | 122,907 | 139,683 | 117,790 | 12,561 | 171,184 | 385,408 |
| 1870..... | 94,794 | 120,565 | 89,696 | 9,830 | 129,697 | 257,893 |
| 1860..... | 99,468 | 153,778 | 93,406 | 9,829 | 155,765 | 387,756 |
| 1850..... | 86,856 | 132,730 | 75,684 | 5,644 | 177,902 | 352,911 |

¹Lambs not included.

In every decade except 1860 to 1870, there has been an increase in the number of dairy cows, the gain for the last

decade being 5,086, or 3.6 per cent. The number reported in 1900 is exclusive of 9,490 "cows not kept for milk" (see Table 14), many of which were doubtless milch cows dry at the time of enumeration. The number of "other neat cattle" in 1900 includes 55,465 calves. It is uncertain whether calves were reported under this head in 1890. If not, their number should be deducted when making comparisons with reports for previous years, in which case a decrease of 35,094, or 28.1 per cent, would be shown for the last decade in the number of "other neat cattle."

In many parts of the state the gradual transfer of labor and capital from general farming to horticulture and market gardening, has necessitated the introduction of new and improved machinery and consequently of more work horses. The number of horses has increased 96.9 per cent since 1850. This increase has been almost continuous, and in the last decade amounted to 14.3 per cent. Mules and asses have increased steadily in number since 1850. The census of 1900 shows 24.1 per cent more than were reported in 1890.

Sheep and swine have fluctuated in number from decade to decade, but since 1890 a decrease of 15.7 per cent is shown for sheep, and an increase of 1.9 per cent for swine.

In comparing the poultry report for 1900 (see Table 14) with that for 1890, it should be borne in mind that in 1900 the enumerators were instructed not to report fowls less than three months old, while in 1890 no such limitation was made. This fact explains to a great extent the decrease shown in the number of fowls of all kinds. Compared with the figures for 1890, the present census shows decreases in the number of fowls as follows: Chickens, 38.4 per cent; geese, 63.4 per cent; turkeys, 63.5 per cent; and ducks, 75.5 per cent.

ANIMAL PRODUCTS.

Table 16 is a summarized exhibit of the animal products of 1899.

TABLE 16.—QUANTITIES AND VALUES OF SPECIFIED ANIMAL PRODUCTS, AND VALUES OF POULTRY RAISED, ANIMALS SOLD, AND ANIMALS SLAUGHTERED ON FARMS, IN 1899.

| PRODUCTS. | Unit of measure. | Quantity. | Value. |
|--------------------------|------------------|-------------|------------|
| Wool..... | Pounds..... | 682,119 | \$142,966 |
| Milk..... | Gallons..... | 164,040,517 | 5,228,698 |
| Butter..... | Pounds..... | 9,096,602 | |
| Cheese..... | Pounds..... | 388,468 | |
| Eggs..... | Dozens..... | 12,511,450 | |
| Poultry..... | | | 1,572,682 |
| Honey..... | Pounds..... | 306,788 | 2,077,490 |
| Wax..... | Pounds..... | 7,860 | 38,857 |
| Animals sold..... | | | 2,372,560 |
| Animals slaughtered..... | | | 2,178,197 |
| Total..... | | | 13,606,450 |

¹Includes all milk produced.

The value of the animal products of the state in 1899 was \$13,606,450, or 31.0 per cent of the value of all farm products and 38.8 per cent of the gross farm income. Of the above amount, 38.4 per cent represents the value of dairy products; 33.4 per cent, that of animals sold and animals slaughtered on farms; 26.8 per cent, that of

poultry and eggs; and 1.4 per cent, that of wool, honey, and wax.

DAIRY PRODUCTS.

In 1899 the proprietors of 3,041 farms, or 6.6 per cent of the farms of the state, derived their principal income from dairy produce. The production of milk in 1899 was 17,439,299 gallons greater than in 1889, a gain of 37.4 per cent.

The quantity of milk sold was 20,654,446 gallons. The milk sold in 1889 was not separately reported, but since 1879 there has been a gain of 15,931,502 gallons, or 337.3 per cent, the quantity sold having greatly increased in every county except Howard, which shows a small decrease, due, doubtless, to the lack of facilities for transportation in most parts of the county.

Of the \$5,228,698 given in Table 16 as the value of all dairy products in 1899, \$1,709,854, or 32.7 per cent, represents the value of such products consumed on farms, and \$3,518,844, or 67.3 per cent, the amount derived from sales. Of the latter sum, \$2,364,319 was realized from 20,654,446 gallons of milk; \$1,069,755, from 5,828,684 pounds of butter; \$70,041, from 135,169 gallons of cream; and \$14,729, from 328,577 pounds of cheese.

In 1879, 7,485,871 pounds of butter were made on farms; in 1889, 9,999,602 pounds; and in 1899, 9,096,602 pounds. The decrease in the last decade is due chiefly to the transfer of butter making from the farm to the creamery, and to the increased demand for milk and cream in cities.

POULTRY AND EGGS.

Of the \$3,650,172 given as the value of the products of the poultry industry, 56.9 per cent represents the value of poultry raised, and 43.1 per cent the value of eggs. The total number of dozens of eggs produced in 1879 was 4,984,776; in 1889, 8,718,593; and in 1899, 12,511,450. The increase in the last decade tends to confirm the statement, made elsewhere, that the decrease in the number of chickens reported in 1900 as compared with the number reported in 1890 is only apparent, being a result of a difference in the methods of enumeration.

WOOL.

Garrett county leads in the production of wool. The production for the state was greatest in 1880, when 850,084 pounds were reported. Since that time there has been a decrease, although the production is now 16.4 per cent greater than it was in 1890.

HONEY AND WAX.

In 1889, 301,157 pounds of honey and 5,946 pounds of wax were reported, while in 1899 the production of honey was 306,788 pounds, and of wax 7,860 pounds. In both years the counties having the greatest production were Garrett, Washington, Baltimore, Frederick, and Wicomico.

HORSES AND DAIRY COWS ON SPECIFIED CLASSES OF FARMS.

Table 17 presents, for the leading groups of farms, the number of farms reporting horses and dairy cows, the

total number of these animals, and the average number per farm. In computing the averages presented, only those farms which report the kind of stock under consideration are included.

TABLE 17.—HORSES AND DAIRY COWS ON SPECIFIED CLASSES OF FARMS, JUNE 1, 1900.

| CLASSES. | HORSES. | | | DAIRY COWS. | | |
|----------------------------------|------------------|---------|-------------------|------------------|---------|-------------------|
| | Farms reporting. | Number. | Average per farm. | Farms reporting. | Number. | Average per farm. |
| Total..... | 41,598 | 148,994 | 3.6 | 36,000 | 147,284 | 4.1 |
| White farmers..... | 36,856 | 138,789 | 3.8 | 33,208 | 142,087 | 4.3 |
| Colored farmers..... | 4,742 | 10,205 | 2.2 | 2,801 | 5,247 | 1.9 |
| Owners ¹ | 26,462 | 85,833 | 3.2 | 23,068 | 86,683 | 3.8 |
| Managers..... | 987 | 5,165 | 5.2 | 877 | 4,964 | 5.7 |
| Cash tenants..... | 3,468 | 10,822 | 3.1 | 2,692 | 11,490 | 4.3 |
| Share tenants..... | 10,686 | 47,674 | 4.5 | 9,372 | 44,147 | 4.7 |
| Under 20 acres..... | 5,961 | 9,267 | 1.6 | 4,042 | 7,411 | 1.8 |
| 20 to 99 acres..... | 15,429 | 36,832 | 2.4 | 13,153 | 36,144 | 2.7 |
| 100 to 174 acres..... | 11,041 | 44,314 | 4.0 | 10,209 | 46,976 | 4.6 |
| 175 to 259 acres..... | 5,287 | 29,455 | 5.6 | 4,958 | 29,152 | 5.9 |
| 260 acres and over..... | 8,880 | 29,126 | 7.5 | 8,647 | 27,601 | 7.6 |
| Hay and grain..... | 9,777 | 55,739 | 5.7 | 8,860 | 49,815 | 5.6 |
| Vegetable..... | 8,164 | 7,294 | 2.3 | 2,154 | 6,244 | 2.9 |
| Fruit..... | 1,407 | 2,637 | 1.9 | 1,271 | 1,550 | 1.2 |
| Live stock..... | 10,933 | 28,812 | 2.6 | 9,180 | 27,417 | 3.0 |
| Dairy..... | 2,782 | 10,455 | 3.8 | 3,041 | 26,538 | 8.7 |
| Tobacco..... | 2,847 | 11,607 | 4.1 | 2,429 | 5,587 | 2.3 |
| Miscellaneous ² | 10,738 | 32,450 | 3.0 | 9,124 | 30,138 | 3.3 |

¹Including "part owners" and "owners and tenants."

²Including sugar farms, florists' establishments, and nurseries.

CROPS.

The following table gives the statistics of the principal crops grown in 1899.

TABLE 18.—ACREAGES, QUANTITIES, AND VALUES OF THE PRINCIPAL FARM CROPS IN 1899.

| CROPS. | Acres. | Unit of measure. | Quantity. | Value. |
|-------------------------------|------------------|------------------|------------|-------------|
| Corn..... | 658,010 | Bushels..... | 19,766,510 | \$7,462,594 |
| Wheat..... | 634,446 | Bushels..... | 9,671,800 | 6,484,088 |
| Oats..... | 44,625 | Bushels..... | 1,109,560 | 340,475 |
| Barley..... | 1,615 | Bushels..... | 42,560 | 18,778 |
| Rye..... | 21,621 | Bushels..... | 279,550 | 141,433 |
| Buckwheat..... | 8,047 | Bushels..... | 115,950 | 58,628 |
| Kafir corn..... | 1 | Bushels..... | 6 | 3 |
| Flaxseed..... | 3 | Bushels..... | 50 | 41 |
| Clover seed..... | | Bushels..... | 10,484 | 45,761 |
| Grass seed..... | | Bushels..... | 616 | 1,019 |
| Hay and forage..... | 374,845 | Tons..... | 507,042 | 4,709,072 |
| Tobacco..... | 42,911 | Pounds..... | 24,689,480 | 1,483,169 |
| Hops..... | (¹) | Pounds..... | 230 | 21 |
| Broom corn..... | 93 | Pounds..... | 35,910 | 1,658 |
| Peanuts..... | 7 | Bushels..... | 143 | 137 |
| Dry beans..... | 605 | Bushels..... | 4,754 | 7,088 |
| Dry pease..... | 947 | Bushels..... | 12,459 | 12,725 |
| Potatoes..... | 26,472 | Bushels..... | 1,991,357 | 1,020,003 |
| Sweet potatoes..... | 6,469 | Bushels..... | 677,848 | 317,462 |
| Onions..... | 503 | Bushels..... | 56,148 | 33,308 |
| Miscellaneous vegetables..... | 99,900 | Bushels..... | | 3,944,959 |
| Maple sugar..... | | Pounds..... | 264,160 | 20,561 |
| Maple sirup..... | | Gallons..... | 5,825 | 8,622 |
| Sorghum cane..... | 63 | Tons..... | 291 | 314 |
| Sorghum sirup..... | | Gallons..... | 4,058 | 1,559 |
| Small fruits..... | 17,516 | | | 1,181,054 |
| Grapes..... | 2775 | | | 438,282 |
| Orchard fruits..... | 291,073 | | | 1,266,047 |
| Tropical fruits..... | | | | 2 |
| Nuts..... | | | | 2,055 |
| Forest products..... | | | | 1,170,362 |
| Flowers and plants..... | 174 | | | 355,862 |
| Seeds..... | 54 | | | 7,183 |
| Nursery products..... | 1,275 | | | 123,474 |
| Willows..... | 28 | Pounds..... | 284,000 | 2,838 |
| Miscellaneous..... | | | | 1,889 |
| Total..... | 2,031,976 | | | 30,216,969 |

¹Less than 1 acre.

²Sold as cane.

³Estimated from number of vines or trees.

⁴Including value of raisins, wine, etc.

⁵Including value of cider, vinegar, etc.

Of the total value of crops, cereals contributed 48.0 per cent; vegetables, including potatoes, sweet potatoes, and onions, 17.6 per cent; hay and forage, 15.6 per cent; fruits and nuts, 8.2 per cent; tobacco, 4.8 per cent; and all other products, 5.8 per cent.

The average values per acre of the various crops are as follows: Flowers and plants, \$2,045; nursery products, \$97; small fruits, \$67; onions, \$66; sweet potatoes, \$49; miscellaneous vegetables, \$39; potatoes, \$39; tobacco, \$34; orchard fruits, \$14; hay and forage, \$13; and cereals, \$11. The crops yielding the highest average returns per acre were grown upon very highly improved land. Their production requires a relatively great amount of labor, and large expenditures for fertilizers.

CEREALS.

The following table is an exhibit of the changes in cereal production since 1849.

TABLE 19.—ACREAGE AND PRODUCTION OF CEREALS: 1849 TO 1899.

| PART 1.—ACREAGE. | | | | | | |
|--------------------|---------|------------|---------|---------|--------|---------|
| YEAR. ¹ | Barley. | Buckwheat. | Corn. | Oats. | Rye. | Wheat. |
| 1899..... | 1,515 | 8,047 | 658,010 | 44,625 | 21,621 | 634,446 |
| 1889..... | 818 | 7,569 | 586,817 | 99,195 | 34,302 | 510,727 |
| 1879..... | 226 | 10,294 | 664,928 | 101,127 | 32,405 | 569,296 |

¹No statistics of acreage were secured prior to 1879.

PART 2.—BUSHELS PRODUCED.

| | | | | | | |
|-----------|--------|---------|------------|-----------|---------|-----------|
| 1899..... | 42,560 | 115,950 | 19,766,510 | 1,109,560 | 279,550 | 9,671,800 |
| 1889..... | 18,778 | 96,747 | 14,928,142 | 2,019,658 | 852,596 | 8,848,177 |
| 1879..... | 6,097 | 186,667 | 15,968,538 | 1,794,872 | 288,067 | 8,004,804 |
| 1869..... | 11,815 | 77,867 | 11,701,817 | 3,221,648 | 307,089 | 5,774,503 |
| 1859..... | 17,350 | 212,383 | 13,444,922 | 3,959,298 | 518,901 | 6,103,480 |
| 1849..... | 745 | 103,671 | 10,749,858 | 2,242,151 | 226,014 | 4,494,680 |

The total area devoted to cereals in 1879 was 1,373,276 acres; in 1889, 1,239,428 acres; and in 1899, 1,368,264 acres. There was a gain in the last decade of 10.4 per cent, and a loss in the last twenty years of 0.7 per cent. Of the total area in cereals in 1899, 48.1 per cent was devoted to corn, 46.4 per cent to wheat, 3.2 per cent to oats, 1.6 per cent to rye, 0.6 per cent to buckwheat, and 0.1 per cent to barley.

The principal cereal crops are corn and wheat, which are grown throughout the state. Corn was raised on 41,249 farms, or 89.6 per cent of the total number; wheat on 26,312 farms, or 57.2 per cent of the total. The acreage in each of these cereals increased during the last decade in every county except Calvert, which showed a slight decrease in wheat. Frederick county reported the largest acreage and production of both wheat and corn.

Most of the barley and rye is raised in Carroll, Frederick, Baltimore, and Montgomery counties. The total acreage in barley increased 85.2 per cent in the last decade, 99.4 per cent of the gain being in the four counties named. The total acreage in rye shows a loss of 37.0 per cent, decreases being shown by nearly all counties.

An increase since 1890 of 6.3 per cent in the acreage in buckwheat, and a decrease of 55.0 per cent in the acreage

in oats, are shown. Garrett county leads in the production of these cereals, having reported 64.3 per cent of the acreage devoted to buckwheat, and 23.2 per cent of the acreage in oats.

The 658,010 acres given in Table 19 as the area devoted to corn in 1899 is exclusive of 100,409 acres of corn, non-saccharine sorghum, and similar crops grown for forage or ensilage.

ORCHARD FRUITS.

The changes in orchard fruits since 1890 are shown in the following table:

TABLE 20.—ORCHARD TREES AND FRUITS: 1890 AND 1900.

| FRUITS. | NUMBER OF TREES. | | BUSHELS OF FRUIT. | |
|-----------------------|------------------|-----------|-------------------|-----------|
| | 1900. | 1890. | 1899. | 1889. |
| Apples..... | 1,824,183 | 1,297,289 | 3,150,673 | 1,410,413 |
| Apricots..... | 2,010 | 912 | 313 | 101 |
| Cherries..... | 70,014 | 84,541 | 60,452 | 12,575 |
| Peaches..... | 4,017,854 | 6,113,287 | 172,303 | 803,019 |
| Pears..... | 690,483 | 274,543 | 301,702 | 60,292 |
| Plums and prunes..... | 100,695 | 13,865 | 19,945 | 2,359 |

The most noteworthy changes between 1890 and 1900 are an increase of 40.6 per cent in the number of apple trees and a decrease of 34.3 per cent in the number of peach trees. In 1890, 16.8 per cent of all fruit trees in the state were apple trees, and 79.0 per cent were peach trees, while in 1900 the corresponding percentages were 27.2 and 59.9. The number of apple trees increased in every county except Kent, the largest relative increases being in Baltimore city and in Wicomico, Charles, Washington, and Garrett counties.

The largest numbers of peach trees are grown in Washington, Caroline, Queen Anne, Kent, and Anne Arundel counties. These counties reported in 1899, 70.8 per cent of all the peach trees in the state. The production of peaches for the state was only 172,303 bushels from 4,017,854 trees, the frosts of 1899 having almost wholly destroyed the crop. Kent and Queen Anne counties reported 1,995,612 fewer trees than in 1889.

Every county shows a large increase in the number of pear trees. In Baltimore city there has been a large decrease. Kent, Queen Anne, Baltimore, Anne Arundel, Cecil, Caroline, and Prince George are the leading pear-growing counties, and report the largest gains for the decade.

The gain in the number of cherry trees, 102.7 per cent, was widely distributed, being everywhere apparent except in Kent, St. Mary, Worcester, Dorchester, and in Baltimore city. The number of plum and prune trees increased 626.3 per cent, Talbot being the only county to report a decrease.

In addition to the number of trees shown in Table 20, unclassified orchard trees to the number of 7,305 were reported, with a yield of 5,278 bushels of fruit. The value of orchard products given in Table 18 includes the value of 42,539 barrels of cider, 12,655 barrels of vinegar, and 89,770 pounds of dried and evaporated fruits.

GRAPES.

Grapes were grown by 6,592 farmers, who obtained, in 1899, 16,859 centals of fruit from 387,492 vines. The total value of grapes grown, including the value of 15,524 gallons of wine and 440 pounds of raisins made on farms, was \$43,282. Washington, Frederick, and Baltimore counties lead in the cultivation of grapes, reporting in 1900 about one-half of the vines of the state.

VEGETABLES AND SMALL FRUITS.

The value of the vegetables grown in 1899, including potatoes, sweet potatoes, and onions, was \$5,315,732, or 15.2 per cent of the gross farm income. Of the total value, 19.2 per cent represents that of potatoes, and 6.0 per cent that of sweet potatoes. Aside from the land devoted to potatoes, sweet potatoes, and onions, 99,900 acres were used in the growing of miscellaneous vegetables. The products of 16,386 acres of this area were not reported in detail; of the remaining area, 43,612 acres were devoted to tomatoes, 16,575 to sweet corn, 7,903 to pease, 4,854 to cabbages, 4,348 to watermelons, 3,461 to muskmelons, 1,090 to beans, and 1,671 to other vegetables.

The total area devoted to the cultivation of small fruits in 1899 was 17,516 acres, distributed among 8,833 farms. The value of the fruits grown was \$1,181,054, an average of \$134 per farm. Of the total area, 13,980 acres, or 79.8 per cent, were devoted to strawberries. The total production of strawberries for the state was 24,085,640 quarts, of which nearly one-third was reported by Anne Arundel county. Other leading counties in the cultivation of this fruit are Somerset, Wicomico, Caroline, Worcester, and Baltimore. In southern Maryland, east of the bay, the soil and climate are especially well adapted to the raising of small fruits, and, as transportation facilities increase, the industry is being rapidly extended. The acreage and production of other berries were as follows: Blackberries and dewberries, 1,501 acres and 1,713,680 quarts; raspberries and Logan berries, 1,384 acres and 1,450,250 quarts; gooseberries, 234 acres and 332,140 quarts; currants, 65 acres and 63,460 quarts; and other berries, 352 acres and 362,420 quarts.

FLORICULTURE.

The florists of Maryland number 121, most of them being located in or near Baltimore. They had invested in the aggregate, \$877,098, of which \$455,635 represents the value of land, and improvements other than buildings; \$387,178, that of buildings; \$23,495, that of implements and machinery; and \$10,790, that of live stock. The value of their products, in 1899, was \$354,490, of which \$334,310 represented the value of flowers and plants, and \$20,180 that of other products. During 1899 the florists expended \$78,363 for labor and \$4,936 for fertilizers.

A large amount of glass was used by both florists and truck gardeners in Anne Arundel and Baltimore counties and in Baltimore city, there being 2,184,390 square feet of land under glass, reported by 1,044 proprietors. The 121 florists used 1,510,844 square feet of glass surface, or 1,133,133 square feet of land under glass.

NURSERIES.

The 15 nurseries in the state had \$288,800 invested in land, buildings, and improvements; \$7,450 in implements and machinery; and 13,218 in live stock. In 1899 their products were valued at \$142,877, of which \$114,512 represented nursery stock, and \$28,365, other products. The expenditure for labor was \$30,695, and for fertilizers \$4,755. The total area reported by nurserymen was 3,685 acres, the average gross income being \$37.11 per acre.

LABOR AND FERTILIZERS.

The total expenditure for labor on farms in 1899, including the value of board furnished, was \$5,715,520, an average of \$124 per farm. The average was highest on the most intensively cultivated farms, being \$2,046 for nurseries, \$648 for florists' establishments, \$216 for hay and

grain farms, \$174 for dairy farms, \$147 for vegetable farms, \$137 for fruit farms, \$92 for sugar farms, \$73 for tobacco farms, \$58 for live-stock farms, and \$89 for miscellaneous farms. "Managers" expended, on an average, \$420; "share tenants," \$131; "cash tenants," \$113; and "owners," \$112. White farmers expended \$138 per farm, and colored farmers \$26.

Fertilizers purchased in 1899 cost \$2,618,890, an average of \$57 per farm and an increase since 1890 of 8.2 per cent. The average expenditure was greatest for nurseries, amounting to \$317. For hay and grain farms the average was \$93; for vegetable farms, \$89; for fruit farms, \$64; for dairy farms, \$50; for miscellaneous farms, \$46; for sugar farms, \$44; for florists' establishments, \$41; for tobacco farms, \$36; and for live-stock farms, \$29.